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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,190	03/13/2002	Shigeki Kanbara	TPS013-US1	3982

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Tyco Electronic Corporation
Intellectual Property Law Department
307 Constitution Drive MS R20/1B
Menlo Park, CA 94025-1164

EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,190

Applicant(s)

KANBARA ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 8/23/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to: See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The claims 1-14 are pending. The examination results are as following.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kambara et al. (US 6,091,406).

Regarding claims 1, 9, Kambara et al. discloses in figs. 5, 9, 15A, an acoustic contact detecting device comprising a substrate having a top surface (3a) and a bottom surface (3b); an acoustic wave transducer (4a, 4b) for coupling with a first wave (bulk wave) representative of a bulk wave being propagated between the top surface and the bottom surface through said substrate along an axis crossing said top surface (see fig. 5, see claim 17); a planar wiring (bone wire 36, col. 30, lines 56-58) for supplying said acoustic wave transducer with an electric power (see col. 27, lines 24-30); a connecting device for connecting the acoustic wave transducer with the planar wiring (see col. 30, lines 59-67, and col. 31, lines 1-5); a diffractive acoustic wave mode coupler having a mode of converted wave having high energy (see col. 32, lines 47-50), on the top surface and functioning for coupling a second wave (Rayleigh wave, see abstract) being

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propagated along an axis parallel to said top surface with said first wave (see claim 17); a means for detecting of said second wave (see wave employed for sensing which detectable a perturbation in the energy, see abstract).

Regarding claim 2, Kambara et al. discloses in figs 5, 9, 15A, a coordinate input device of touch-type comprising (see touch panel or touch surface, see fig. 19B): a propagation medium having a top surface and capable of propagating an acoustic wave; a bulk wave generation means for propagating a bulk wave in a crossing direction with respect to said top surface of said propagation medium; a planar wiring for supplying this bulk wave generation means (see col. 30, lines 59-67, and col. 31, lines 1-5) with an electric power (see col. 27, lines 24-30); a connecting device for providing an electrical connection between said bulk wave generation means and said planar wiring (see col. 30, lines 59-67, and col. 31, lines 1-5);); an acoustic wave generation means for converting said bulk wave into an acoustic wave and propagating said acoustic wave on the top surface of said propagation medium; and a detecting means (see abstract) for detecting a scatter in the surface of the acoustic wave from said acoustic wave generation means.

Regarding claim 3, Kambara et al. discloses an acoustic wave transducer is composed of a piezoelectric vibrator (see col. 30, lines 60-65).

Regarding claim 4, Kambara et al. discloses the wiring is formed by using conductive paste (see metal substrate, see col. 33, lines 17-21)

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Regarding claims 5-6, Kambara et al. discloses the wiring is formed by way of transfer printing, and formed on back surface of the substrate (see col. 33, lines 17-21).

Regarding claim 7, discloses the connecting device is made of conductive material having a step corresponding to a profile of the acoustic wave transducer (see claim 36)

Regarding claim 10, Kambara et al. discloses in figure 5, 15B, a touch input device (touch panel) comprising a substrate (20) having a first planar surface (22) and a second planar surface (42), an acoustic wave transducer for generating acoustic wave, the acoustic wave transducer coupled to the second planar surface such that generated acoustic waves are transmitted to the first planar surface; planar wiring applied to the second planar surface; and means for connecting the planar wiring to the acoustic wave transducer (see claims, 1 and 9).

Regarding claims 11-13, Kambara et al. discloses that the means for connecting the planar wiring to the acoustic wave transducer may comprise a discrete connector (see col. 38, lines 47-50) and composite conductive material and planar wiring is applied by transfer printing as discussed above.

Regarding claim 14, Kambara et al. discloses the touch input further comprising a linear array of acoustically reflective elements on the first planar surface (244) and wherein the planar wiring resides on a portion of the second planar surface (246) substantially opposite to the linear array of acoustically reflective elements (see col. 37, lines 9-19).

Allowable Subject Matter

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3. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

None of the cited art teaches or suggests that the acoustic wave transducer comprises a piezoelectric substrate and a piezoelectric vibrator having electrode sections disposed on both surfaces of said piezoelectric substrate, and said planar wiring comprises a first wiring section capable of contacting with one of said electrode sections of said piezoelectric vibrator by way of line or face contact and a second wiring section spaced and insulated from the first wiring section wherein said connecting device is formed in a form capable of connecting the other electrode section of said piezoelectric vibrator with said second wiring section.

Response To Arguments

5. Applicant's arguments with respect to claims 1-14 filed on 8/23/05 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
November 10, 2005

AMR A. AWAD
PRIMARY EXAMINER

